

A

A

B

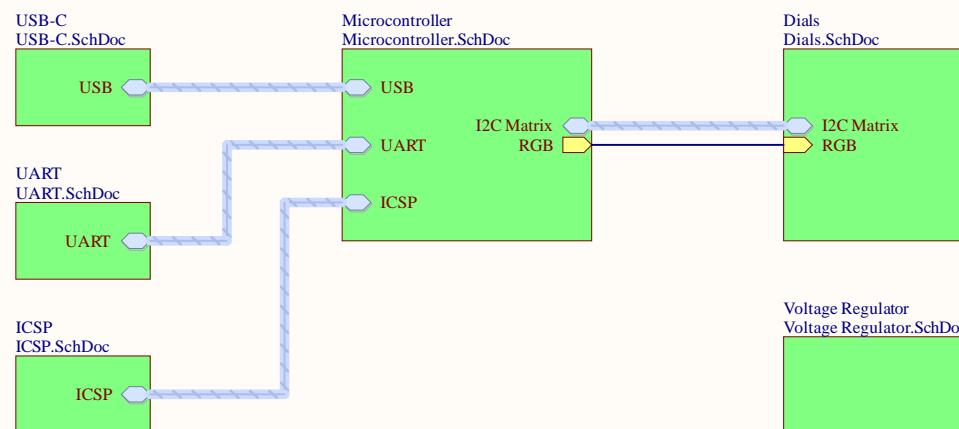
B

C

C

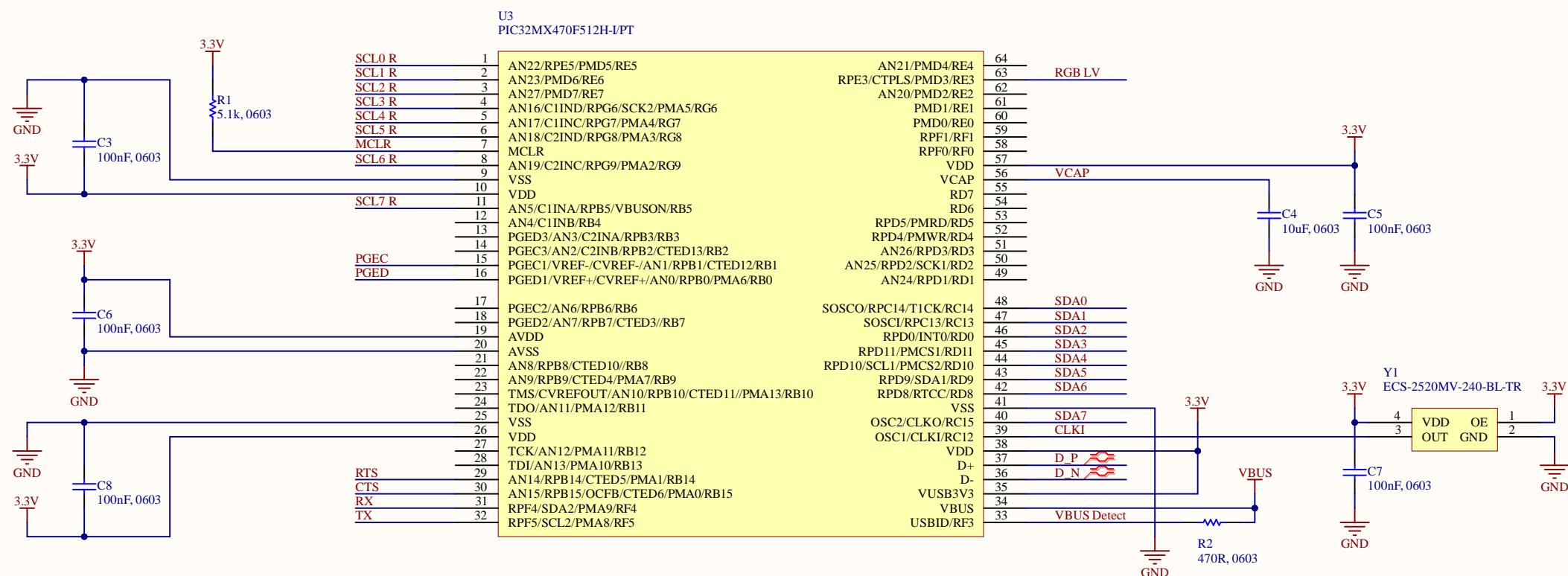
D

D



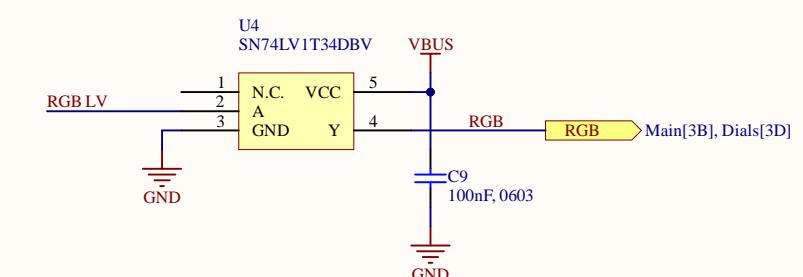
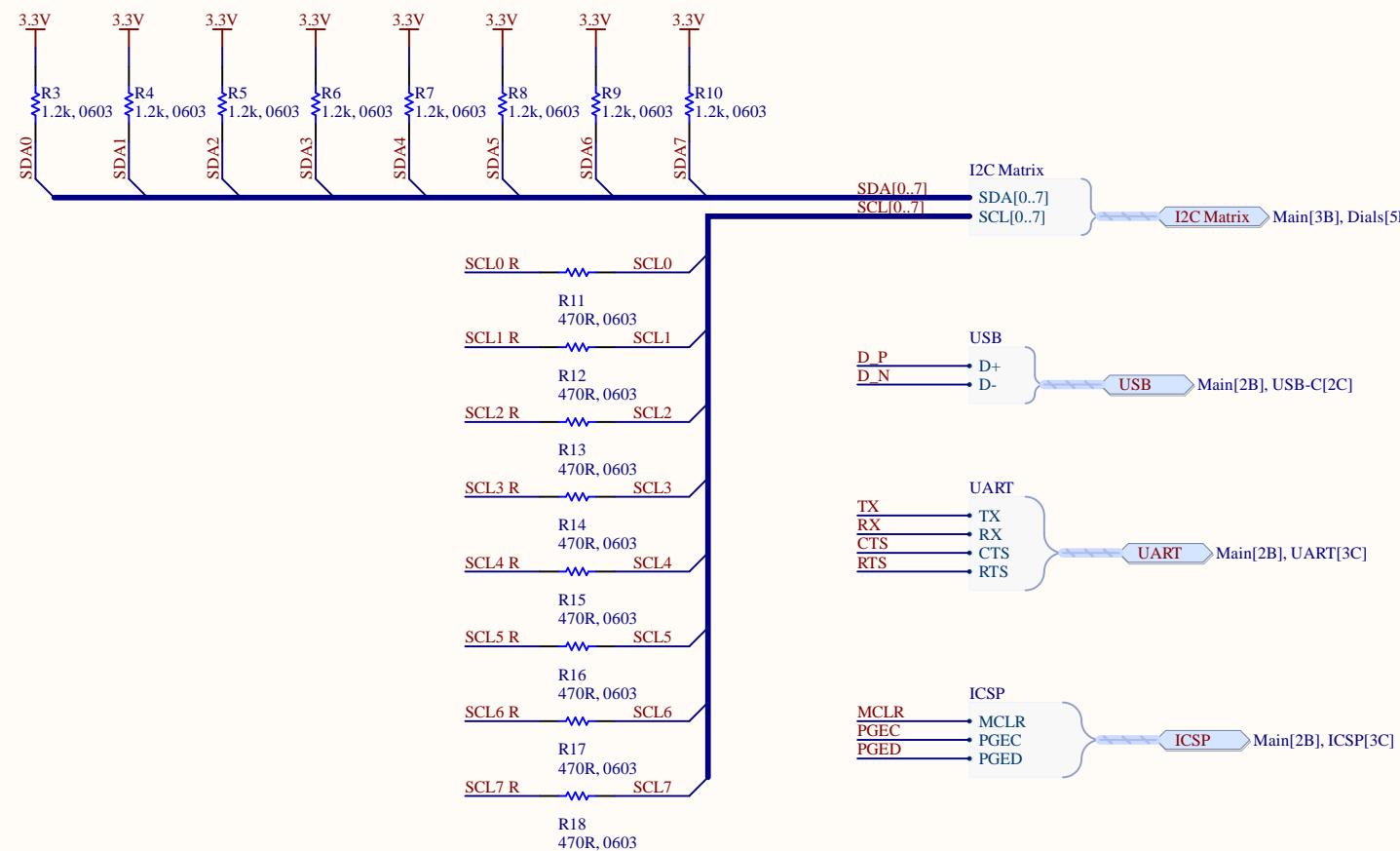
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A4		
Date:	1/05/2023	Sheet of
File:	C:\MyFiles\..\Main.SchDoc	Drawn By:

A



▲ [VBUS Detect] requires PIC32MX internal pull-down

B



Title		
Size	Number	Revision
A3		
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File: C:\MyFiles\..\Microcontroller.SchDoc		Drawn By:

D

A

A

B

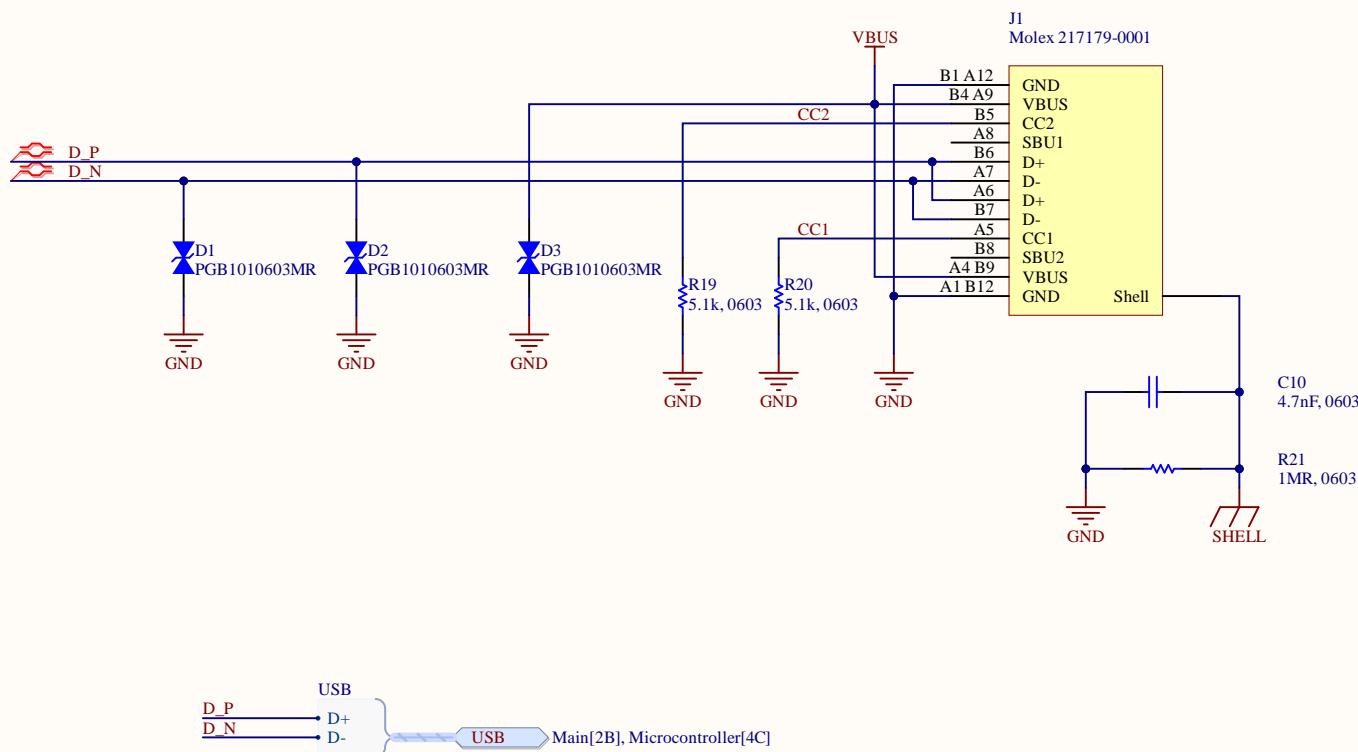
B

C

C

D

D



Title		
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A

A

B

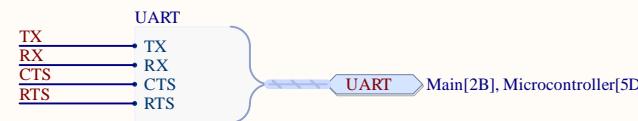
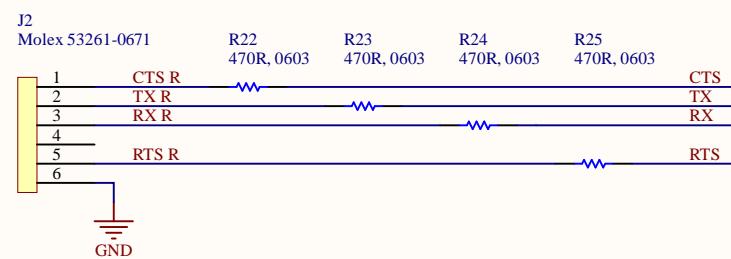
B

C

C

D

D



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A

A

B

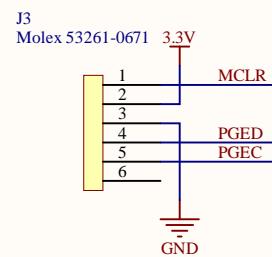
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C

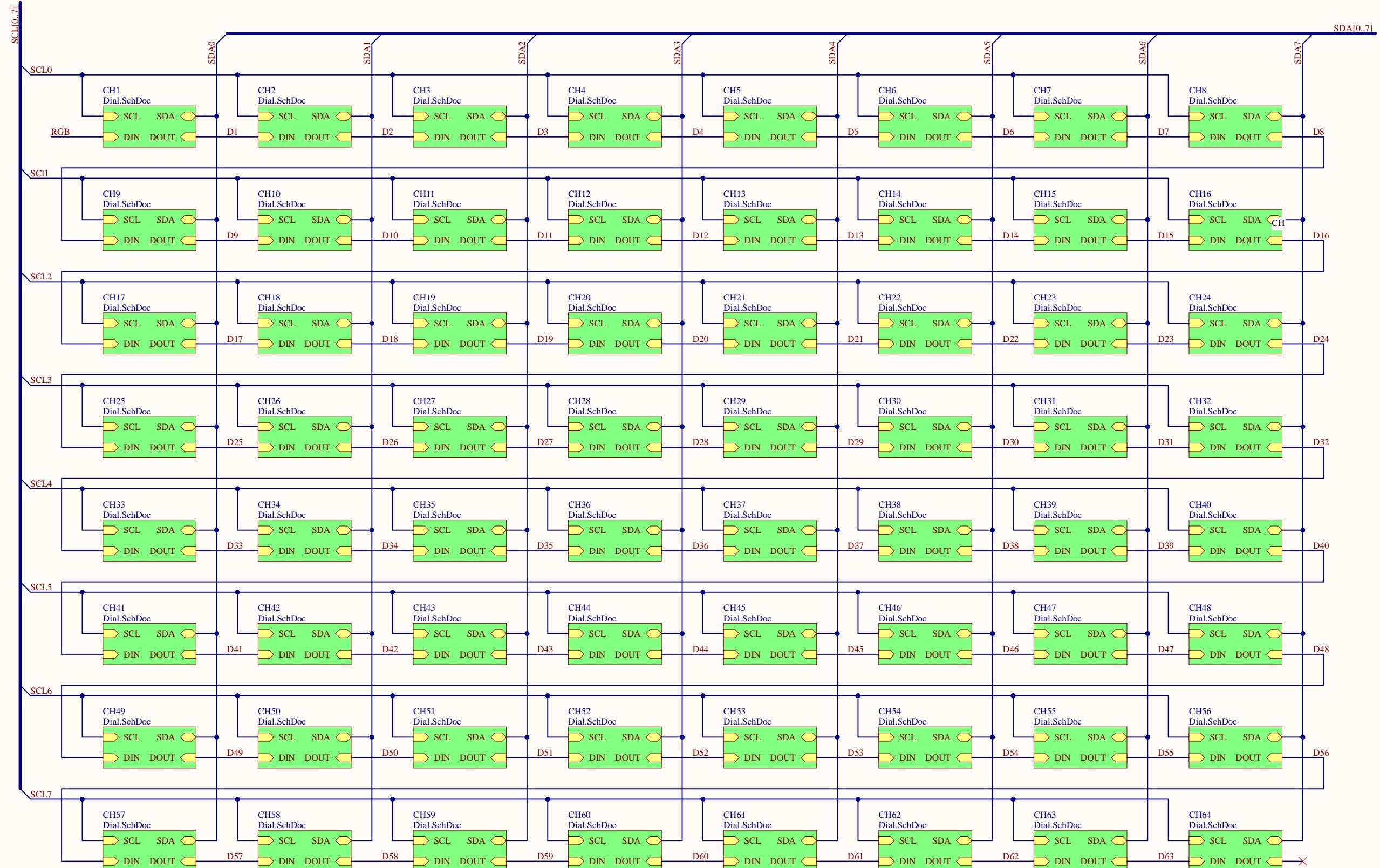
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D

D



Title		
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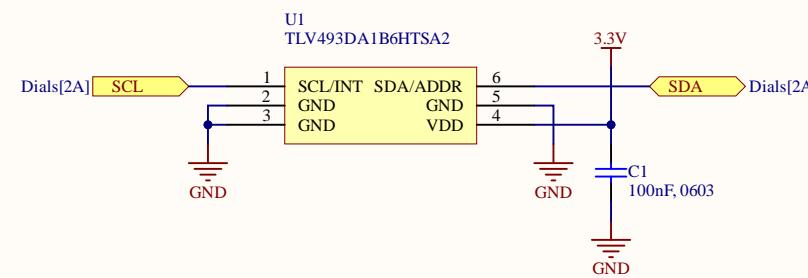
RGB — Main[3B], Microcontroller[7C]

I2C Matrix  
 SDA[0..7]      SDA[0..7]  
 SCL[0..7]      SCL[0..7]

Title		
Size	Number	Revision
A3		
Date: 1/05/2023	Sheet of	
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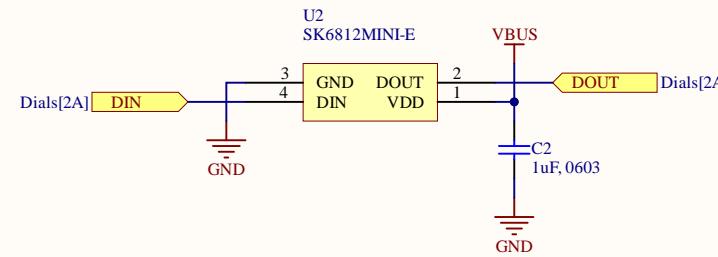
A

A



B

B



C

C

Title		
Size	Number	Revision
A4		
Date: 1/05/2023	Sheet of	
File: C:\MyFiles..\Dial.SchDoc		Drawn By:

A

A

B

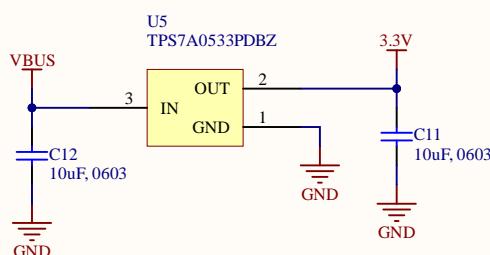
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C

C

D

D



Title		
Size A4	Number	Revision
Date: 1/05/2023	Sheet of	
File: C:\MyFiles..\Voltage Regulator.SchDoc	Drawn By:	



ICSP

UART

J3

J2

J1

C5

C4

C3

C2

C1

U1

U2

U3

U4

R1

R2

R3

R4

R5

R6

R7

R8

R9

R10

R11

R12

R13

R14

R15

R16

R17

R18

C3

C4

C5

C6

C7

D1

D2

D3

Y1

Y2

J2

J1

C10

C11

C12

C13

C14

C15

C16

C17

C18

C19

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95% 95% 95% 95% 95% 95% 95% 95%

95% 95% 95% 95% 95% 95% 95% 95%

95% 95% 95% 95% 95% 95% 95% 95%

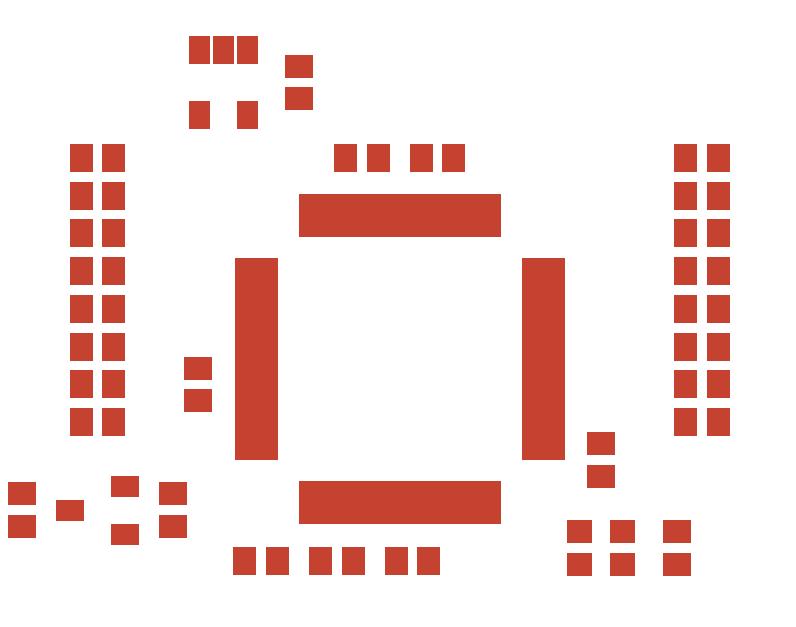
95% 95% 95% 95% 95% 95% 95% 95%


95% 95% 95% 95% 95% 95% 95% 95%

95% 95% 95% 95% 95% 95% 95% 95%

95% 95% 95% 95% 95% 95% 95% 95%


95% 95% 95% 95% 95% 95% 95% 95%











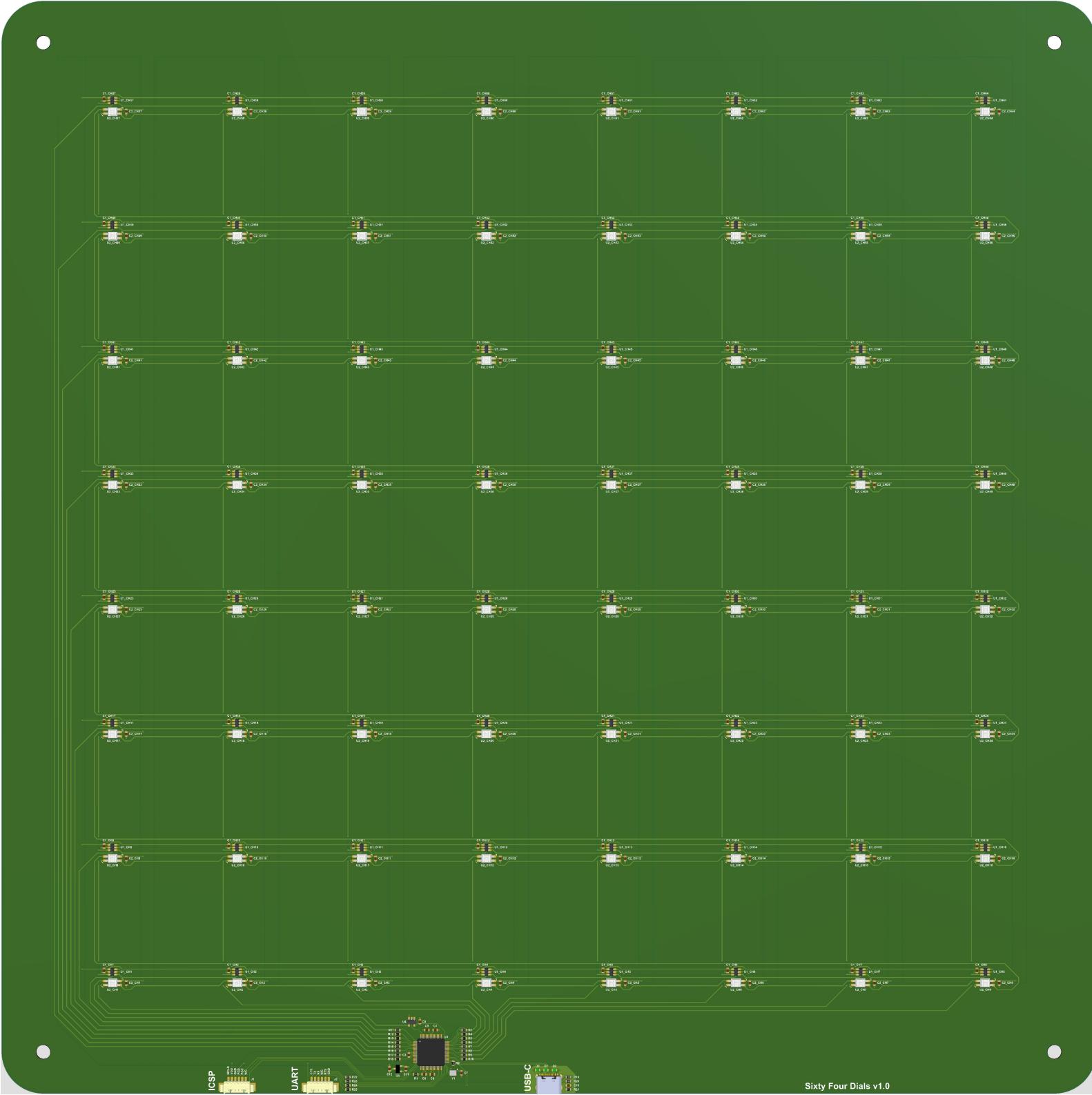










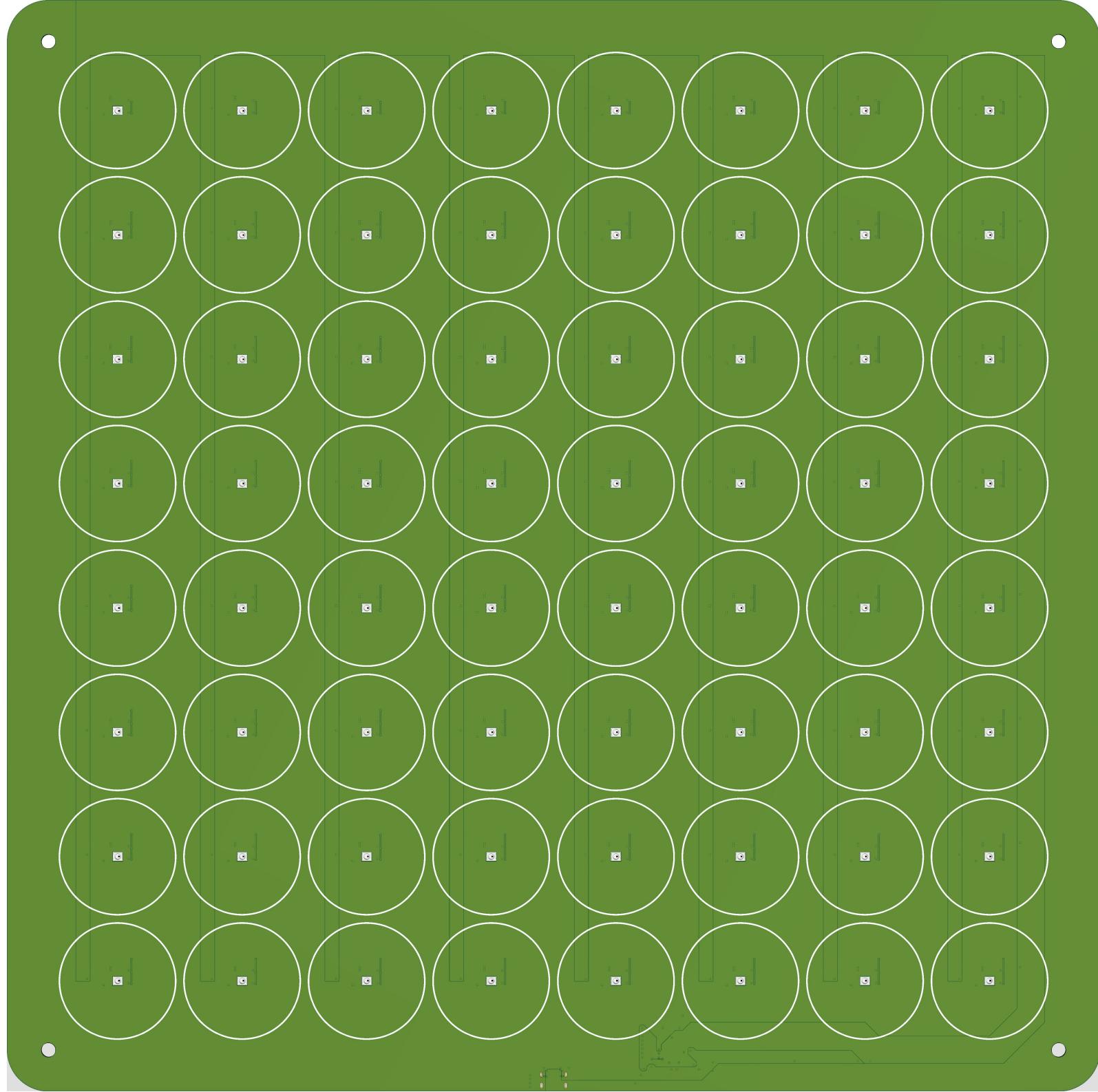


ICSP

UART

USB-C

Sixty Four Dials v1.0







ICSP

UART

USB-C



Designator	Quantity	Comment	Footprint
C1_CH1, C1_CH2, C1_CH3, C1_CH4, C1_CH5, C1_CH6, C1_CH7, C1_CH8, C1_CH9, C1_CH10, C1_CH11, C1_CH12, C1_CH13, C1_CH14, C1_CH15, C1_CH16, C1_CH17, C1_CH18, C1_CH19, C1_CH20, C1_CH21, C1_CH22, C1_CH23, C1_CH24, C1_CH25, C1_CH26, C1_CH27, C1_CH28, C1_CH29, C1_CH30, C1_CH31, C1_CH32, C1_CH33, C1_CH34, C1_CH35, C1_CH36, C1_CH37, C1_CH38, C1_CH39, C1_CH40, C1_CH41, C1_CH42, C1_CH43, C1_CH44, C1_CH45, C1_CH46, C1_CH47, C1_CH48, C1_CH49, C1_CH50, C1_CH51, C1_CH52, C1_CH53, C1_CH54, C1_CH55, C1_CH56, C1_CH57, C1_CH58, C1_CH59, C1_CH60, C1_CH61, C1_CH62, C1_CH63, C1_CH64, C3, C5, C6, C7, C8, C9	70	100nF, 0603	Capacitor 0603
C2_CH1, C2_CH2, C2_CH3, C2_CH4, C2_CH5, C2_CH6, C2_CH7, C2_CH8, C2_CH9, C2_CH10, C2_CH11, C2_CH12, C2_CH13, C2_CH14, C2_CH15, C2_CH16, C2_CH17, C2_CH18, C2_CH19, C2_CH20, C2_CH21, C2_CH22, C2_CH23, C2_CH24, C2_CH25, C2_CH26, C2_CH27, C2_CH28, C2_CH29, C2_CH30, C2_CH31, C2_CH32, C2_CH33, C2_CH34, C2_CH35, C2_CH36, C2_CH37, C2_CH38, C2_CH39, C2_CH40, C2_CH41, C2_CH42, C2_CH43, C2_CH44, C2_CH45, C2_CH46, C2_CH47, C2_CH48, C2_CH49, C2_CH50, C2_CH51, C2_CH52, C2_CH53, C2_CH54, C2_CH55, C2_CH56, C2_CH57, C2_CH58, C2_CH59, C2_CH60, C2_CH61, C2_CH62, C2_CH63, C2_CH64	64	1uF, 0603	Capacitor 0603
C4, C11, C12	3	10uF, 0603	Capacitor 0603
C10	1	4.7nF, 0603	Capacitor 0603
D1, D2, D3	3	PGB1010603MR	Diode TVS 0603
J1	1	Molex 217179-0001	Molex 217179-0001
J2, J3	2	Molex 53261-0671	Molex 53261-0671
R1, R19, R20	3	5.1k, 0603	Resistor 0603
R2, R11, R12, R13, R14, R15, R16, R17, R18, R22, R23, R24, R25	13	470R, 0603	Resistor 0603
R3, R4, R5, R6, R7, R8, R9, R10	8	1.2k, 0603	Resistor 0603
R21	1	1MR, 0603	Resistor 0603
U1_CH1, U1_CH2, U1_CH3, U1_CH4, U1_CH5, U1_CH6, U1_CH7, U1_CH8, U1_CH9, U1_CH10, U1_CH11, U1_CH12, U1_CH13, U1_CH14, U1_CH15, U1_CH16, U1_CH17, U1_CH18, U1_CH19, U1_CH20, U1_CH21, U1_CH22, U1_CH23, U1_CH24, U1_CH25, U1_CH26, U1_CH27, U1_CH28, U1_CH29, U1_CH30, U1_CH31, U1_CH32, U1_CH33, U1_CH34, U1_CH35, U1_CH36, U1_CH37, U1_CH38, U1_CH39, U1_CH40, U1_CH41, U1_CH42, U1_CH43, U1_CH44, U1_CH45, U1_CH46, U1_CH47, U1_CH48, U1_CH49, U1_CH50, U1_CH51, U1_CH52, U1_CH53, U1_CH54, U1_CH55, U1_CH56, U1_CH57, U1_CH58, U1_CH59, U1_CH60, U1_CH61, U1_CH62, U1_CH63, U1_CH64	64	TLV493DA1B6HTSA2	SOT-23-6
U2_CH1, U2_CH2, U2_CH3, U2_CH4, U2_CH5, U2_CH6, U2_CH7, U2_CH8, U2_CH9, U2_CH10, U2_CH11, U2_CH12, U2_CH13, U2_CH14, U2_CH15, U2_CH16, U2_CH17, U2_CH18, U2_CH19, U2_CH20, U2_CH21, U2_CH22, U2_CH23, U2_CH24, U2_CH25, U2_CH26, U2_CH27, U2_CH28, U2_CH29, U2_CH30, U2_CH31, U2_CH32, U2_CH33, U2_CH34, U2_CH35, U2_CH36, U2_CH37, U2_CH38, U2_CH39, U2_CH40, U2_CH41, U2_CH42, U2_CH43, U2_CH44, U2_CH45, U2_CH46, U2_CH47, U2_CH48, U2_CH49, U2_CH50, U2_CH51, U2_CH52, U2_CH53, U2_CH54, U2_CH55, U2_CH56, U2_CH57, U2_CH58, U2_CH59, U2_CH60, U2_CH61, U2_CH62, U2_CH63, U2_CH64	64	SK6812MINI-E	SK6812MINI-E
U3	1	PIC32MX470F512H-I/PT	TQFP-64
U4	1	SN74LV1T34DBV	SOT-23-5
U5	1	TPS7A0533PDBZ	SOT-23
Y1	1	ECS-2520MV-240-BL-TR	ECS-2520MV-240-BL-TR